

# **Quick Connection Spring Cage Hybrid Terminal Block QTCS**

Article description	QTCS 1,5 *		
Article no.	3050138 *		
EC-TYPE EXAMINATION CERTIFICATE IECEx-CERTIFICATE	KEMA 04ATEX2226 U * IECEx KEM 07.0007 U *		
Marking	Ex e II KEMA 04ATEX2226 U IECEx KEM 07.0007 U		
Assembly on mounting rails	NS 35 acc. to EN 60715-TH 35		
Stripping length 1) 10 mm			
Frequency of circuit at same cross-section 2)	100		
Assembly instructions	See page 2		
Operating temperature range	-45 °C +90 °C		
Wiring temperature range	-10 °C +90 °C		





# Technical data according to EN 60079-7 (increased safety "e")

Rated insulation voltage Rated voltage	500 V 550 V	
Nominal current	17,0 A	
Max. rated current	17,0 A	
Connection capacity		
Rated cross-section	1,5 mm <sup>2</sup>	AWG 16
Max conductor cross-section	1,5 mm² rigid and flexible <sup>2)</sup> 2,5 mm² flexible <sup>1)</sup> 4 mm² rigid <sup>1)</sup>	AWG 16 AWG 14 AWG 12
Connectable conductor cross-section	0,08 - 2,5 mm² flexible 1) 0,08 - 4 mm² rigid 1) 0,25 - 1,5 mm² rigid and flexible 2)	AWG 28 - 14 AWG 28 - 12 AWG 24 - 16

### Data of insulation material

Description	PA 6.6
Creep resistance acc. to	
IEC 60112 / material group	CTI 600 / I

Accessories	Description	Article no.	
Cover	D-QTCS 1,5	3206270	
Jumper	FBS 2-5 FBS 3-5 FBS 4-5 FBS 5-5 FBS 10-5 FBS 20-5	3030161 3030174 3030187 3030190 3030213 3030226	Max. 17,0 A / 1,5 mm²

<sup>1)</sup> only Spring Cage Connection only Quick Connection

<sup>\*</sup> valid for colour variants

#### Important assembly instructions - increased safety "e"

The Quick Connection (Hybrid) Terminal Blocks are suitable for use in enclosures in atmospheres with flammable gases or combustible dust. For flammable gases these enclosures must satisfy the requirements according to EN 60079-0 and EN 60079-7. For combustible dust these enclosures must satisfy the requirements according to EN 50281-1-1.

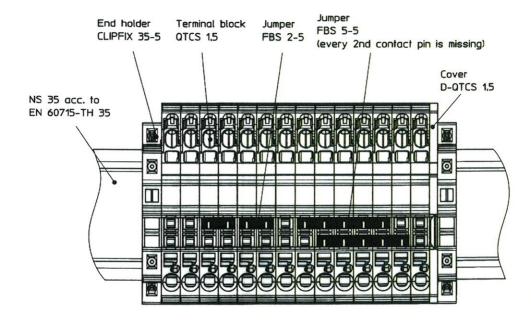
When assembling with other certified series and sizes of terminal blocks and using belonging accessories, the required creepage distances and clearances have to be observed.

When using the jumpers to achieve a skipped bridging the rated voltage is reduced to 352 V.

If conductors with smaller cross section as the rated cross section are used, the belonging lower current has to be laid down in the EC-Type Examination Certificate of the complete apparatus.

The Quick Connection (Hybrid) Terminal Blocks may be used, based on the self-heating when used at the nominal current and at ambient temperatures of -45 °C to +40 °C at the mounting position in electrical apparatus, e.g. junction and connection boxes, for temperature class T6. When the Terminal Blocks are used in electrical apparatus of temperature classes T1 up to T5, the highest temperature of the insulating material shall not exceed the maximum value of the operating temperature range.

The Terminal Blocks and their appropriate accessories have to be assembled as specified below.





### Operational instructions - Intrinsic safety "i"

EN 60079-14 Clause 12 describes modular terminal blocks as simple apparatus when used in intrinsicallysafe circuits. Testing by a notified body and marking is not required. If terminal blocks be identifiable as part of an intrinsically circuit are marked by a colour, the colour used shall be light blue.

Testing for compliance to intrinsically safe requirements including clearance, creepage, and solid insulation distances specified in EN 60079-0 (EN 50014) and EN 60079-11 (EN 50020) have been performed for circuits up to 60 V.

Compliance with distance requirements of EN 60079-14 Clause 12.2.3 for the connection of separated intrinsically-safe circuit accessories is met. A minimum distance of 50 mm to separate clamping units of intrinsically-safe and non intrinsically-safe circuits is required through the use of a separating plate or similar device.

## **Attestation of Conformity**

The above mentioned product is in line with the provisions of the below marked directive and their modification directive(s):

94/9/EC

**ATEX Directive** 

Compliance with Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2004

EN 60079-7:2003

EN 50281-1-1:1998 + A1

The conformity with the provisions of the ATEX directive were certified by

Notified Body:

KEMA Quality B.V.

Address:

Utrechtseweg 310, NL-6812 AR Arnhem, The Netherlands [Ident.-No.: 0344]

Certificate:

(No., Date)

KEMA 04ATEX2226 U, 2004-12-14

Blomberg, 2007-12-11

A. Gerhard Leßmann **Business Unit Device Connection** Technology Ex-Representative

Dirk Görlitzer Business Unit Industrial Connection Technology Head of Business Unit

This attestation certifies the conformity with the indicated directive, it does not, however, covenant any characteristics. The instructions for safety and installation have to be observed.

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